



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/776,851 | 02/11/2004 | Uwe Jurgen Becker | CM2687MQ | 3886 |

27752 7590 05/29/2009
THE PROCTER & GAMBLE COMPANY
Global Legal Department - IP
Sycamore Building - 4th Floor
299 East Sixth Street
CINCINNATI, OH 45202

| |
|----------|
| EXAMINER |
|----------|

CHAPMAN, GINGER T

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3761

| | |
|-----------|---------------|
| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

05/29/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/776,851 | Applicant(s) BECKER ET AL. | |
| | Examiner Ginger T. Chapman | Art Unit 3761 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/02/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3761

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 20, 2009 has been entered.

Status of the Claims

2. Claims 1, 3-7, 9, 12 and 21 are pending in the application, claim 1 is amended.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 3761

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

5. Claims 1, 3-7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (EP 1 088 537 A2) in view of Gross et al (US 6,403,857 B1).

6. With respect to claim 1, Suzuki teaches an absorbent article comprising:

A chassis including a liquid impervious backsheet and a liquid pervious topsheet (¶s 0003 & 0032); and

An absorbent core (M/M') located between said backsheet and said topsheet wherein said absorbent core (M/M') comprises:

first and second substrate layers (M)(M') each having absorbent material (SAP) deposited on said first and second substrate layers;

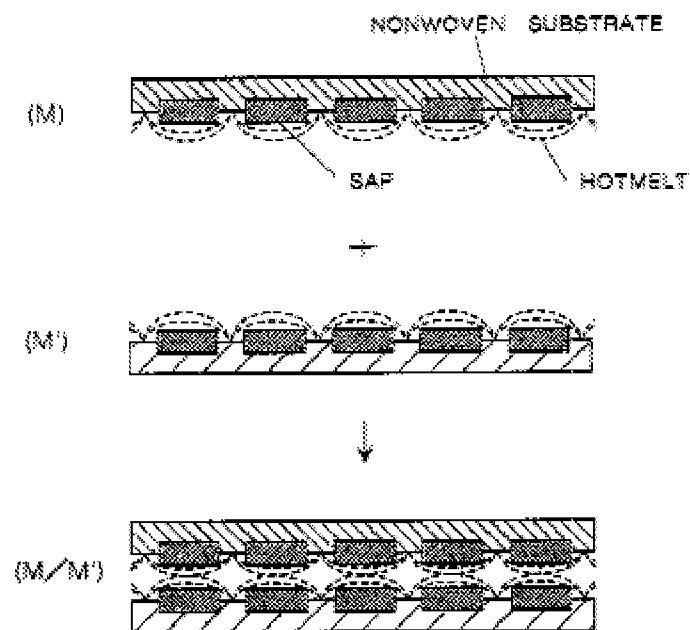
and a thermoplastic material (hotmelt), wherein said thermoplastic material (hotmelt) contacts at least portions of the absorbent material (SAP) and at least portions of said first and second substrate layers (M)(M') such that the absorbent material (SAP) is immobilized on said first and second substrate layers (M)(M'),

Art Unit: 3761

wherein said first and second substrate layers (M)(M') are combined together such that said thermoplastic material (hotmelt) of each of said first and second substrate layers (M)(M') contact one another;

said absorbent material (SAP) comprises an absorbent polymer material and a absorbent fibrous material, wherein said absorbent material (SAP) is immobilized (trapped in pockets in hotmelt/substrate layers) when wet such that said absorbent core (M/M') achieves a wet immobilization (liquid is immobilized in the pockets by the superabsorbent (SAP and pocket structure))(see fig. 17, infra).

Suzuki discloses that the SAP may at least be partly in the form of fibers and/or bonded to fine cellulose fibers as well as the desirability of maximizing the amount of resin (§s 0042 & 0043).



Art Unit: 3761

Regarding claims 1 and 7, Suzuki does not expressly disclose the specific degree of wet immobilization, claimed ranges of % fibrous material or basis weight.

Optimization of ranges of parameters within prior art ranges or through routine experimentation is not sufficient to patentably distinguish the invention over the prior art. MPEP § 2144.05. “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

Regarding claim 1, the benefits of immobilizing the inner materials of a diaper when soaked with urine would have been known prior to applying a test (e.g., preventing the absorbent materials from bunching up excessively in discrete areas of the diaper causing discomfort to a wearer, or aesthetic considerations), making these values result-effective variables. One of ordinary skill in the art would have recognized that increasing the wet immobilization properties of the absorbent material in a diaper or similar article would increase its resistance to moving around between top and back sheets and would prevent the absorbent from bunching up uncomfortably. One of ordinary skill in the art would also recognize the benefits of maximizing the % of resin relative to fibers (increased absorbency) MPEP § 2144.04.

Suzuki discloses the claimed invention except for a discontinuous layer of absorbent material deposited on the substrate layers and portions of the substrate layers forming areas of

Art Unit: 3761

junction where the thermoplastic material contacts the layers and such that the absorbent material of the first layer substrate faces areas of junction of the second substrate layer and the absorbent material of the second substrate layer faces areas of junction of the first layers and the first and second layers do not contact each other. Suzuki provides motivation to hold or immobilize the superabsorbent polymer material in place within the absorbent core (abstract, [0008] to improve the absorbent capacity of the article. Gross, at c. 2, ll. 45-46, provides motivation to localize or immobilize the absorbent material in place within an absorbent core to improve absorbent retention of the article.

Gross teaches a discontinuous layer of deposited absorbent material (c. 3, ll. 3-10); thermoplastic material contacts portions of the absorbent material and portions of the substrate layers forming areas of junction where the thermoplastic material contacts the substrate layers (c. 3, ll. 6-8) and, as best depicted in Figures 1A and 1B, the absorbent material of the first substrate (acquisition of distribution layer having the areas of junction on the garment-facing underside in facing the areas of junction of the bonded superabsorbent layer, and the first and second layers do not contact each other because the fibrous absorbent layer having areas of junction on its surface sides is interposed therebetween; c. 6, ll. 50-65 and c. 7, ll. 1-17). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the core of Suzuki as taught by Gross since Gross states, at c. 7, ll. 28-35, that the benefit of forming the core with this design is that solves the problem of containment of the absorbent material during handling and processing thereby facilitating manufacture of the article and additionally provides the absorbent material in a layer located away from the skin of the wearer

Art Unit: 3761

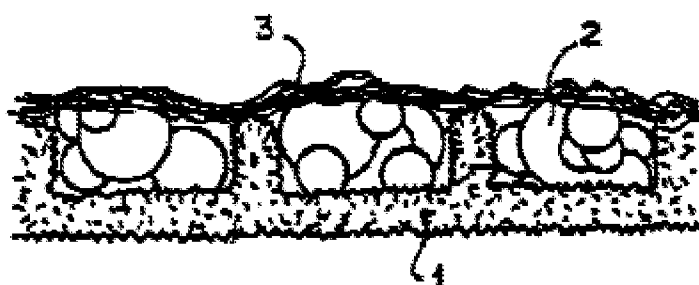
and the absorbent material is well-contained on the web in its layer and the swelling thereof is not impeded by being entrapped within the fiber matrix.

Regarding claim 7, one of ordinary skill in the art would have recognized that increasing the basis weight of absorbent material would increase the absorbent capacity of the absorbent core, while reducing it would result in less cost or bulkiness. Thus these parameters are result-effective variables and as such, it would have been obvious to optimize them.

Regarding claim 3, Suzuki teaches that the thermoplastic material includes a hot melt adhesive (see fig 17, supra).

Regarding claim 4, Suzuki teaches that said thermoplastic material (hotmelt) is fiberized or fibrous (§ 0057); Gross teaches the thermoplastic material is fiberized (c. 6, l. 4-6; l. 57, ll. 60-61) .

Regarding claim 5, Suzuki teaches that said thermoplastic material (3) substantially immobilizes said absorbent polymers (2)(see fig. 2, infra).



Regarding claim 9, Suzuki discloses that at least one of the substrate layers (1) is a hydrophilic nonwoven (§ 0058).

Regarding claim 12, mere changes in size alone are not sufficient to patentably distinguish an invention over the prior art. In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220

Art Unit: 3761

USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. MPEP § 2144.04.

5. Claims 6 and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzuki, in view of Gross and further in view of Tanzer *et al.* (WO 01/15647 A1; hereinafter "Tanzer").

Suzuki does not expressly disclose a profiled distribution of absorbent polymer or an auxiliary adhesive.

Regarding claim 6, Tanzer teaches an absorbent core (12, 42, 50, 58) having a distribution of absorbent polymer material wherein the distribution of absorbent polymer material is profiled (polymer (58) distribution changes along longitudinal length of sheet (12))(see fig. 3, *supra*).

Regarding claim 21, Tanzer discloses an auxiliary adhesive (page 11, lines 12-19); Gross discloses an auxiliary adhesive (c. 6, ll. 27-28, ll. 35-38).

Where a claimed improvement on a device or apparatus is no more than "the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement," the claim is unpatentable under 35 U.S.C. § 103(a). *Ex Parte Smith*, 83 USPQ.2d 1509, 1518-19 (BPAI, 2007)(citing *KSR v. Teleflex*, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007)). Accordingly, Applicant claims a combination that only unites old elements with no change in the respective functions of those old elements, and the combination of those elements yields predictable results; absent persuasive evidence that the

Art Unit: 3761

modifications necessary to effect the combination of elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. § 103(a). *Ex Parte Smith*, 83 USPQ.2d at 1518-19 (BPAI, 2007)(citing *KSR*, 127 S.Ct. at 1740, 82 USPQ2d at 1396). Accordingly, since the applicant[s] have submitted no persuasive evidence that the combination of the above elements is uniquely challenging or difficult for one of ordinary skill in the art, the claim is unpatentable as obvious under 35 U.S.C. § 103(a) because it is no more than the predictable use of prior art elements according to their established functions resulting in the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for improvement.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 3-7, 9, 12 and 21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ginger T. Chapman whose telephone number is (571)272-4934. The examiner can normally be reached on Monday through Friday 9:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3761

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ginger T Chapman/
Examiner, Art Unit 3761
5/21/09

/Tatyana Zalukaeva/
Supervisory Patent Examiner, Art Unit 3761